

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Sanae ITO, et al.

SERIAL NO: New Application

GAU:

FILED: Herewith

EXAMINER:

FOR: SIMULATION METHOD, SIMULATION PROGRAM, AND SEMICONDUCTOR DEVICE MANUFACTURING METHOD EACH EMPLOYING BOUNDARY CONDITIONS



INFORMATION DISCLOSURE/RELATED CASE STATEMENT UNDER 37 CFR 1.97

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION


- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

  
Marvin J. Spivak  
Registration No. 24,913

C. Irvin McClelland  
Registration Number 21,124



22850

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 10/98)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: Sanae ITO, et al.

SERIAL NO.: New Application

FILED: Herewith

FOR: SIMULATION METHOD, SIMULATION PROGRAM, AND SEMICONDUCTOR  
DEVICE MANUFACTURING METHOD EACH EMPLOYING BOUNDARY  
CONDITIONS



**STATEMENT OF RELEVANCY**

**Reference AO (2000-267890) of Form PTO-1449.**

Simulated results are graphically shown to users interactively so that users can see the dependence of input parameters on results.

**Reference AP (11-176707) of Form PTO-1449.**

Calculated results and predicted their error are shown to users using information DB of differences between simulated values and measured values, so that even untrained users can do simulation without making mistake.

**Reference AQ (2-222159) of Form PTO-1449.**

Error correction method to the boundary condition effects for numerical capacitance calculation of periodically placed interconnect line pattern.

Form PTO 1449  
(Modified)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY DOCKET NO.  
217804US2SERIAL NO.  
New Application

## LIST OF REFERENCES CITED BY APPLICANT

APPLICANT  
Sanae ITO, et al.FILING DATE  
Herewith

GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

J1050 U.S. PTO  
10/028319  
12/28/01

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO
	AO	2000-267890	09/29/00	Japan (with English abstract)		X
	AP	11-176707	07/02/99	Japan (with English abstract)		X
	AQ	2-222159	09/04/90	Japan (with English abstract)		X
	AR					
	AS					
	AT					
	AU					
	AV					

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AW	"TWO-DIMENSIONAL PROCESS SIMULATION PROGRAM", Avant!, TSUPREM-4, User's Manual, Version 1999.2, June 1999, (5 pages)
	AX	"TWO-DIMENSIONAL DEVICE SIMULATION PROGRAM", Avant MEDICI, User's Manual, Version 1999.2, July 1999, (4 pages)
	AY	Naoyuki SHIGYO, et al., "THE INFLUENCE OF BOUNDARY LOCATIONS ON WIRING CAPACITANCE SIMULATION", IEEE Transactions on Electron Devices, Vol. 36, No. 6, June 1989, pgs. 1171 - 1174.
	AZ	

Examiner

Date Considered

\*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.